YES, THANK YOU; WE LOVE FERNS

Otto Degener & Isa Degener

Dr. W. H. Wagner, Junior's article on "Pteridology in Hawaii," appearing in the Newsletter of the Hawaiian Botanical Society 2: 117-123, 1963, will stimulate workers to renewed industry. There are three statements expressed to which we personally do not subscribe. First, to quote: "I do not agree with propaganda that the Hawaiian flora will soon disappear and that 'all is lost'." We believe ephemeral malihinis tend to lack the vision former and present kamaainas gradually acquire. Dr. J. F. Rock, not long before his passing, remarked that his recent visits to his old collecting grounds were like attending a funeral - so many of his plant friends had disappeared. How rapid Dr. Wagner's "soon" is for definite areas is debatable. "Soon," for example, caught up years ago with the dry native forest and Lipochaeta plains of West Molokai where the kane writer gathered such plants as Canthium, Gardenia, Nestegis, and Sesbania in 1928, all now represented in herbaria as vouchers to give an inkling as to what the flora there was like. Even in 1928, he failed to unearth the West Molokai Kokia cookei, at that time already extinct in the wild state. "Soon" is just around the corner for the Kanepuu forest, overrun with axis deer, of Lanai; the belt of forest southeast of Ulupalakua, Maui; and the Sesbania colony of Kaena Point, Oahu. "Soon" is somewhat deferred for the flora peculiar to Kaala, Oahu, where government buildings now stand; and the Waikamoi rain-forest of Maui where the endemics are being bulldozed aside for the planting of exotic timber trees. We fear how soon is "soon" for the native Hamakua forest of Hawaii whose remnant Walker, Tomich and Mendes at the head of the local Civic Improvement Committee are valiantly striving to save from being engulfed by the planting of sugarcane; and for square miles of native forest on the same island which are being bulldozed for the planting of Fraxinus uhdei. To dub as "propaganda" our efforts in behalf of true Conservation, not Exploitation for the purpose of garnering dollars and cents, is unfortunately a distinct disservice to the biotic and scenic welfare of our State.

Second, we do not believe "that there are really three different species of holly-fern, Polystichum, at the top of Mauna Haleakala in Maui, not two." We have studied this assemblage of plants repeatedly in the field, without haste while living among them near Holua Cave, and in several local and foreign herbaria. The two classical species form swarms of hybrids of almost all possible intergradations. To mistake one of these, as we mentioned in our Flora Hawaiiensis 1/18/63 and 3/15/63, as a distinct species is not difficult at all.

The third statement that "the time is now nigh for collecting

by specialists, rather than crude gathering or 'hay-baling' of all plants in sight," we consider a half-truth. We workers today feel frustrated when investigating a species to find that the type specimen possesses only the briefly written "Sandwich Islands" on the foxed, brittle label. How useful and fascinating it would be for us if the precise locality on the definite island had been recorded! The practice of collecting the same species time after time - evidently termed contemptuously as "hay-baling" - not only will give future, curious workers a more definite record as to the distribution at a precise date of various taxa, it will make accessible to botanists for research and teaching a wealth of useful material, perhaps of the same species but very unlikely always of the same taxon in an archipelago noted for the "variability of the species." The kane writer's gifts of Hawaiian plants to his alma mater in Massachusetts are to this day a considerable help as illustrative material not only for Taxonomy but even Freshman Botany courses. With this in mind, since 1922 he has likewise scattered duplicate specimens by sale and gift to the University of Michigan and other institutions of learning throughout the World. Our aim, living in a fast-vanishing endemic flora, is to make hay while the sun shines, and we advise our amateur and professional colleagues to do likewise. Is it wise to lull them into complacency?

Were our public herbaria deprived of the riches collected by such "amateurs" as the horticulturist Douglas; Chaplain Diell; planter Baldwin; Director Brigham and the tubercular college youth Horace Mann, Jr.; physician Hillebrand; rancher Munro; accountant Topping; and the youngster Rock who studied to enter the priesthood and never took a formal college course in Botany; what a vast hiatus would prevail in our faulty knowledge of the Hawaiian flora! When did the amateur Rock, for instance, become a specialist? No, the specialist sorely needs the help of amateurs of whom the present day can list such names as Brash, Bush, Desha, Kato, McGuire, Obata, Pang, Pekelo, Roe and many others.

As it is impossible to publish authoritatively about any group of plants whatsoever without familiarity with their literature, we herewith add a Supplement to "Some Recent References on Hawaiian Pteridology" appearing on page 123 of Dr. Wagner's article in the November Newsletter. As our work is incomplete, we hope our readers will contribute further supplements with the aim not only of getting but for evermore keeping Dr. Merrill's famous bibliography of species nicknamed "The Pink Slips" complete at least so far as the Hawaiian Islands are concerned. To do so, the species mentioned in these articles must be transcribed in the Merrill method and the transcriptions intercalated with their fellows reposing in the Marie C. Neal Herbarium of the B. P. Bishop Museum.

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BOOK REVIEWS

Alma L. Moldenke

"Biosynthetic Pathways in Higher Plants" edited by J. B. Pridham and T. Swain, xi & 212 pp., illus., Academic Press, London & New York. 75 sh. or $12.00

These valuable papers are the proceedings of the 1964 Plant Phenolics Group Symposium held at the University of Leeds, mostly British in authorship, and covering the biosynthesis of carotenoids, terpenoids, amino acids, proteins, nucleotides, sugars, starches, cellulose, lignin, piperidine alkaloids, chlorophylls, and plant di- and tri-carboxylic acids. There is a general discourse on the interrelationships among tissues, cells, organelles and the biochemical phenomena occurring therein. There is another descriptive of the various techniques used in these biochemical studies.

Because the level of approach is both advanced and well explained this book can serve as a really useful source of information for many students, workers and instructors in all related fields. Fine copy, diagrams, illustrations and indexes add to the value of the book.

"Comparative Phytochemistry" edited by T. Swain, xiii & 360 pp., illus., Academic Press, London & New York. 93 sh. or $14.75

Like the above-mentioned book, this one consists of papers presented at a symposium by the Phytochemical Group in Cambridge in 1965 and represents the organizational work of one of the same editors. Since it describes the progress of research of the most recent years of this newly established branch of science and the